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# Product datasheet for RC211723

## ORC4L (ORC4) (NM_181741) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | ORC4L (ORC4) (NM_181741) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | ORC4L |
| **Synonyms:** | ORC4L; ORC4P |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC211723 representing NM_181741
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCAGTCGTAAATCAAAGAGTAACAGCTTAATTCACACAGAGTGCCTTTCACAGGTACAAAGAATTT
TACGTGAAAGATTTTGTCGTCAGAGTCCACATAGTAACCTATTTGGAGTGCAAGTACAATACAAACACTT
AAGTGAGCTGCTGAAAAGAACTGCTCTCCATGGAGAGAGTAACTCTGTCCTTATTATCGGACCCCGAGGA
TCAGGAAAAACTATGTTAATAAATCATGCTTTGAAAGAACTCATGGAAATAGAAGAAGTGAGTGAAAATG
TATTACAAGTTCACTTAAATGGACTGCTGCAGATCAATGACAAAATCGCCCTAAAGGAAATCACAAGGCA
GTTAAATCTGGAAAATGTAGTTGGAGATAAAGTTTTTGGAAGCTTTGCTGAAAACCTTTCATTTCTTCTG
GAAGCTTTAAAAAAAGGTGACCGAACTAGCAGTTGCCCAGTGATCTTCATATTAGATGAATTTGATCTTT
TTGCTCATCATAAAAACCAAACACTTCTCTATAATCTTTTTGACATTTCTCAGTCTGCACAGACCCCAAT
AGCAGTTATTGGTCTTACATGTAGATTGGATATTTTGGAACTCTTAGAAAAAAGAGTGAAGTCAAGATTT
TCTCACCGGCAGATACACTTAATGAATTCATTTGGTTTTCCACAGTATGTTAAAATATTTAAAGAACAGT
TATCTCTACCTGCAGAGTTTCCAGACAAGGTTTTTGCTGAGAAGTGGAATGAAAATGTTCAGTATCTCTC
AGAAGATAGAAGTGTGCAAGAAGTACTACAGAAGCATTTCAATATCAGCAAAAACCTGCGGTCATTACAC
ATGCTATTGATGCTTGCTTTAAATCGAGTAACAGCATCGCACCCATTTATGACTGCCGTAGATCTAATGG
AAGCAAGCCAACTGTGTAGCATGGACTCGAAAGCAAATATTGTACATGGTCTATCAGTCTTGGAAATCTG
TCTTATAATAGCAATGAAACATTTAAATGACATCTATGAGGAAGAGCCATTTAATTTTCAAATGGTCTAT
AATGAGTTTCAGAAGTTTGTTCAAAGGAAAGCACATTCCGTTTATAATTTTGAAAAACCTGTTGTCATGA
AGGCTTTTGAACACTTGCAGCAATTAGAATTAATAAAGCCCATGGAAAGAACTTCAGGAAATTCACAGAG
AGAGTACCAGCTGATGAAACTGCTTTTGGATAATACTCAAATTATGAATGCTCTGCAGAAATATCCCAAC
TGTCCTACAGATGTGAGGCAGTGGGCAACATCCTCACTAAGCTGGTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC211723 representing NM_181741
Red=Cloning site Green=Tags(s)

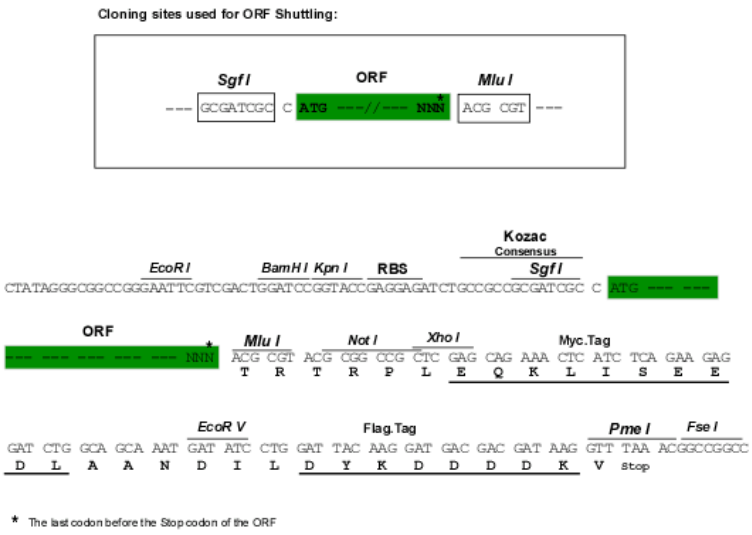
MSSRKSKSNSLIHTECLSQVQRILRERFCRQSPHSNLFGVQVQYKHLSELLKRTALHGESNSVLIIGPRG
SGKTMLINHALKELMEIEEVSENVLQVHLNGLLQINDKIALKEITRQLNLENVVGDKVFGSFAENLSFLL
EALKKGDRTSSCPVIFILDEFDLFAHHKNQTLLYNLFDISQSAQTPIAVIGLTCRLDILELLEKRVKSRF
SHRQIHLMNSFGFPQYVKIFKEQLSLPAEFPDKVFAEKWNENVQYLSEDRSVQEVLQKHFNISKNLRSLH
MLLMLALNRVTASHPFMTAVDLMEASQLCSMDSKANIVHGLSVLEICLIIAMKHLNDIYEEEPFNFQMVY
NEFQKFVQRKAHSVYNFEKPVVMKAFEHLQQLELIKPMERTSGNSQREYQLMKLLLDNTQIMNALQKYPN
CPTDVRQWATSSLSWL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6323_g06.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_181741

**ORF Size:** 1308 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** NM_181741.4

**RefSeq Size:** 2793 bp

**RefSeq ORF:** 1311 bp

**Locus ID:** 5000

**UniProt ID:** O43929

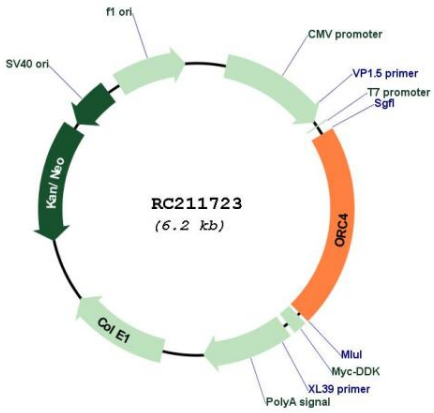
**Cytogenetics:** 2q23.1

**Protein Pathways:** Cell cycle

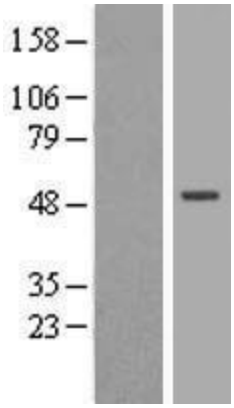
**MW:** 50.2 kDa

**Gene Summary:** The origin recognition complex (ORC) is a highly conserved six subunit protein complex essential for the initiation of the DNA replication in eukaryotic cells. Studies in yeast demonstrated that ORC binds specifically to origins of replication and serves as a platform for the assembly of additional initiation factors such as Cdc6 and Mcm proteins. This gene encodes a subunit of the ORC complex. Several alternatively spliced transcript variants, some of which encode the same protein, have been reported for this gene. [provided by RefSeq, Oct 2010]

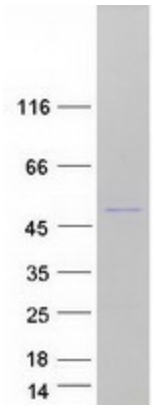
## Product images:




Circular map for RC211723




Western blot validation of overexpression lysate (Cat# [LY405645]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211723 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified ORC4 protein (Cat# [TP311723]). The protein was produced from HEK293T cells transfected with ORC4 cDNA clone (Cat# RC211723) using MegaTran 2.0 (Cat# [TT210002]).